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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mayumi Tomikawa

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EXAMINER

ADDY, THJUAN KNOWLIN

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

10/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/879,098	Applicant(s) TOMIKAWA ET AL.	
	Examiner THJUAN K. ADDY	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-24 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 and 15-19 is/are allowed.
- 6) ☒ Claim(s) 20-24 and 26-32 is/are rejected.
- 7) ☒ Claim(s) 23 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on July 07, 2008 has been entered. Claims 1, 13, 15, 19, 20, 21, 22, 23, 24, 27, 30, and 31 have been amended. Claims 14 and 25 have been cancelled. Claim 32 has been added. Claims 1-13, 15-24, and 26-32 are now pending in this application, with claims 1, 13, 15, 19, 20, 21, 22, 23, 24, 27, 30, 31, and 32 being independent.

Allowable Subject Matter

2. Claims 1-13 and 15-19 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter: The invention as claimed is not disclosed nor rendered obvious in view of the prior art of record. As to independent claims 1, 13, 15, and 19, the prior art of record fails to teach or suggest, alone or in combination, the recited distribution route generation apparatus and computer-readable storage medium that records a computer program for enabling a computer to perform a process for collecting device collecting information about a communications cost between a plurality of nodes of a communications network the nodes including a plurality of redistribution servers which copy and branch streaming data at respective branch points in the communication network to multi-cast the streaming data in an application layer where route cost is based on delay and number of hops, stream rate, reference rate, predetermined value

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as an additional cost and coefficients used to convert delay to number of hops where
$$\text{route cost} = \text{number of hops} + \alpha * \max(0, (\text{delay} - \beta)) * \text{stream rate/reference rate}$$

+ predetermined value and a generation device automatically generating distribution
route information, which indicates a plurality of distribution routes to a plurality of clients
on the communications network forced to pass through at least one of the redistribution
servers from a source, based on the information about the communications cost when
the streaming data are originated and distributed from the source to the plurality of
clients.

4. Claims 2-12 and 16-18 are dependent upon claims 1 and 15, respectively,
therefore, claims 2-12 and 16-18 are allowed.

Claim Objections

5. Claims 23 and 26 are objected to because of the following informalities: Line 10,
of claim 23, recites "one redistribution server **t**". Examiner believes that the "**t**" does not
belong, and should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 20-24 and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodialam et al (US 6,778,531), in view of Weaver (US 6,574,669), in view of Nakamichi et al. (US 6,859,842), and further in view of Sim (US 7,181,523).
7. In regards to claims 20-24, 27, 28, and 30-32, Kodialam discloses all of claims 20-24, 27, 28, and 30-32 imitations (See col. 1 lines 14-30, col. 1-2 lines 53-8, col. 5 lines 1-25, col. 8 lines 4-12, and col. 10 lines 30-48), except the specific calculations, in which $\text{cost} = \text{number of hops} + \alpha * \max(0, \text{delay} - \beta) * \text{stream rate/reference rate} + \text{predetermined value}$ and where alpha and beta are coefficients to convert delay to number of hops. Weaver, however, does disclose cost as being based on delay, number of hops, stream rate (e.g., speed), and predetermined value (e.g., cost of route, which is typically a metric defined by an administrator) as an additional cost (See col. 1 lines 35-58), and Nakamichi discloses cost as being based on reference rate (e.g., transmission speed) (See col. 2 lines 13-21). Although, Weaver, neither Nakamichi disclose the specific formula recited in claim 28, Weaver does use the Dijkstra algorithm to calculate routes (See col. 1 lines 45-58).

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8. In regards to claim 26, Kodialam discloses all of claim 26 limitations, except a system, wherein the network comprises the Internet. Sim, however, does disclose a system, wherein the network comprises the Internet (See col. 6 lines 53-65).

9. In regards to claim 29, Kodialam discloses all of claim 29 limitations, except a method, wherein the predetermined value is set by a network manager to restrict flow through a route. Weaver, however, does disclose a method, wherein the predetermined value (e.g., cost of route) is set by a network manager (e.g., administrator) to restrict flow through a route (See col. 1 lines 35-58).

Response to Arguments

10. Applicant's arguments with respect to claims 1-13, 15-24, and 26-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THJUAN K. ADDY whose telephone number is (571)272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thjuan K. Addy/
Primary Examiner, Art Unit 2614